State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text and Availability of Additional Documents and/or Information

PROPOSED REGULATION FOR GREENHOUSE GAS EMISSION STANDARDS FOR CRUDE OIL AND NATURAL GAS FACILITIES

Public Hearing Date: March 23, 2017
Public Availability Date: February 3, 2017
Deadline for Public Comment: February 21, 2017

At its public hearing on July 21, 2016, the Air Resources Board (ARB or Board) considered staff's proposed regulation, Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, Title 17, California Code of Regulations, sections 95665 through 95667 and Appendices A through C. The proposed regulation would impose emissions controls on equipment located at onshore and offshore production and processing facilities as well as natural gas compressor stations, underground storage facilities, and gathering and boosting stations.

The Board directed the Executive Officer to determine if additional conforming modifications to the regulation were appropriate and to make any proposed modified regulatory language available for public comment, with any additional supporting documents and information, for a period of at least 15 days in accordance with Government Code section 11346.8. The Board further directed the Executive Officer to consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer was directed to evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare written responses to such comments as required by ARB's certified regulations at California Code of Regulations, title 17, sections 60000-60007 and Government Code section 11346.9(a). The Executive Officer was further directed to present to the Board, at a subsequently scheduled public hearing, staff's written responses to environmental comments and the final environmental analysis for consideration for approval, along with the finalized regulation for consideration for adoption.

All regulatory documents for this rulemaking are available online at the following ARB website:

https://www.arb.ca.gov/regact/2016/oilandgas2016/oilandgas2016.htm

The text of the modified regulatory language is shown in Attachment 1. The originally proposed regulatory language is shown in plain text, and the modified regulatory

language is shown in ~~strikethrough~~ to indicate deletions and underline to indicate additions.

In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding all noticed changes. Therefore, staff will only address comments received during this 15-day comment period that are responsive to this notice, documents added to the record, or the changes detailed in Attachment 1.

Summary of Proposed Modifications

Staff's proposed modifications to the originally proposed regulatory text to sections 95665, 95667, 95668, 95669, 95670, 95671, 95672, 95673, 95674, 95675, 95677, Appendix C, title 17, CCR are summarized below and attached to this notice as Attachment 1. All subsequent section references are to title 17, CCR, unless otherwise noted.

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting; nor does it include all of the non-substantive revisions made to improve clarity. For a complete account of all modifications in the proposed regulatory amendments, refer to the underline and strikeout sections of the regulation and Appendix C in Attachment 1.

A. Modifications to Section 95665. Purpose and Scope.

This section was modified to clarify that facilities located in sectors identified in section 95666 are subject to the proposed regulation.

B. Modifications to Section 95666. Applicability.

No changes were made to this section.

C. Modifications to Section 95667. Definitions.

A definition for "blowout" was added to describe an event at a natural gas storage facility that requires the owner or operator to conduct daily Optical Gas Imaging. This change is necessary to define a new term that was added to the proposed regulation.

The definition for "centrifugal compressor" was modified to clarify that only centrifugal compressors are subject to the regulation standard. The previous definition could have been interpreted to include other types of compressors. This change is necessary to ensure that definition only applies to centrifugal compressors.

The definition for "circulation tank" was modified to clarify that the regulation only pertains to circulation tanks used prior to placing a well into production. This change is

necessary to clarify the intent of the regulation and ensure that the requirements do not apply to tanks that are used for routine well maintenance.

The definition for "component" was modified to clarify that a pressure-relief device is considered a component and is subject to the leak detection and repair requirements listed in section 95669. This modification is necessary to define a component which was not previously defined. The words "natural gas powered" were also added to clarify that the regulation only pertains to natural gas powered devices and pumps. This change is necessary to ensure that the requirements do not apply to devices that may use compressed air or electricity to operate.

The definition for "critical process unit" was modified to include a group of components. This change is necessary to allow an owner or operator to identify a unit that includes multiple components without the need to specify every individual component.

The definition for "flash or flashing" was modified to clarify that gas is dissolved in liquid. This change is necessary because the term entrained was not technically accurate. An additional change was also made to clarify that flashing occurs when liquid is transferred from a pressure vessel to an atmospheric tank. This change is necessary to clarify different vessels and processes where flashing can occur.

The definition for "natural gas gathering and boosting station" was modified to clarify that the requirements apply to facilities moving natural gas to a natural gas processing plant or distribution pipeline. This change is necessary to clarify the definition and that the requirements do not apply to other types of processing plants.

The definition for "natural gas transmission compressor station" was modified to clarify that these stations may also be located within a natural gas underground storage field. This change is necessary to ensure the definition includes additional facilities where compressor stations may also be located.

A definition for "non-associated gas" was added to harmonize with terminology used by the Department of Conservation Division of Oil, Gas, and Geothermal Resources. A previous reference to the term dry gas in section 95668(a)(2) of the regulation was replaced with non-associated gas. This change is necessary to ensure that the most current terminology is used in the regulation.

A definition for "optical gas imaging" was added to describe an instrument that may be used for screening a facility for natural gas emissions or for monitoring a blowout. This modification is necessary to include a term that was not previously defined.

The definition for "pond" was modified to clarify that a pond is an excavation and that the requirements apply to ponds that are used for routine storage and/or the disposal of produced water. These changes are necessary to clarify the intent of the definition.

The definition for "portable pressurized separator" was modified to eliminate the term "steady-state conditions." This change is necessary because the vessel temperature and pressure may change constantly.

The definition for "pressure vessel" was modified to include the word "continuous," which allows for a release of pressure through a pressure-relief device in order to function normally. This change is necessary to clarify the intent of the definition.

The definition for "separator" was modified to include the term natural gas. This clarification is necessary because some separators are used to separate natural gas in addition to crude oil, condensate, or produced water liquids.

The definition for "sump" was modified to include the term "excavated" to better describe how a sump can be a surface impoundment or an excavation in the earth's surface. This change is necessary to clarify the intent of the definition.

The definition for "vapor collection system" was modified to include the word "vapors." This change is necessary to clarify the intent of the definition.

The definition for "vapor control efficiency" was modified to add the term "mass flow rate." This change is necessary because this is a method that is commonly used for determining efficiency and was not previously included.

The definition for "well" was modified to harmonize with terminology used by the Department of Conservation Division of Oil, Gas, and Geothermal Resources and to reflect the intent of the proposed regulation. The modifications were made to specify the types of wells that are subject to the proposed requirements and to specify wells that are not applicable. This change is necessary to clarify the intent of the definition and to clarify the types of wells that are subject to the proposed requirements.

D. Modifications to Section 95668. Standards.

Section 95668. Standards.

Section 95668 was modified to include the phrase "located in sectors." This modification was necessary to clarify the types of facilities subject to the proposed regulation. This same term has been included in other sections found throughout the regulation.

Section 95668(a). Separator and Tank Systems.

Section 95668(a)(2) was modified to clarify that an owner or operator of a separator and tank system must maintain and be able to provide records used to demonstrate an exemption with the proposed standards. This change was necessary so that ARB or a local air district can verify compliance with the standards.

Section 95668(a)(2)(A) was modified to clarify this exemption based on questions and stakeholder feedback. The exemption is for systems that produce less than 50 barrels of crude oil or condensate per day, which also accounts for water produced with the oil or condensate. This change has no impact on our original emissions analysis and was made to clarify the exemption. Originally, this section contained a combined crude oil and produced water exemption, but the produced water exemption has been clarified and placed in section 95668(a)(2)(B).

Section 95668(a)(2)(B) was added to clarify an exemption for produced water. This exemption was originally combined with the crude oil exemption in section 95668(a)(2)(A). The new section was created to clarify that the exemption is intended for non-associated gas systems (systems that do not produce crude oil) that produce less than 200 barrels of day of water. This modification has no impact on our original emissions analysis.

Section 95668(a)(2)(C) was modified to clarify that this exemption is for vapor collection systems that have been approved for use by a local air district, and to include an implementation date of January 1, 2018. This change was necessary to clarify that separator and tank systems that are already controlled for emissions using a district approved system installed by this date are not subject to the testing or vapor collection system requirements.

Section 95668(a)(2)(D) was added to include an exemption for separator and tank systems that are controlled with the use of blanket gas. Blanket gas is used to prevent the interior of tanks from corrosion. In these systems, the tanks are pressurized using natural gas and maintained under a slight positive pressure. However, they are often maintained under pressures below 15 psig and therefore cannot be classified as a pressure vessel. This change was necessary to properly identify the systems and prevent the unintended requirement to control these systems with a vapor collection system. These tank systems and components are subject to the leak detection and repair requirements specified in section 95669.

Section 95668(a)(2)(E) was modified to increase the minimum number of days per year that a tank may be filled with liquid before becoming subject to the vapor collection system requirements, and to specify that records must be maintained at the facility in order to demonstrate how many days the tank contained liquid. The minimum number of days was changed to 45 from 30 days based on a report from a stakeholder stating that 30 days is not sufficient time to conduct routine well work. These changes were necessary to verify compliance with the requirement and ensure that adequate time is available to perform temporary well work without requiring the installation of controls which are intended for separator and tank systems that are used on a routine basis.

Section 95668(a)(2)(H) was modified to clarify that this exemption applies to waste products containing petroleum that are discharged from equipment. This modification was necessary to clarify that the exemption does not apply to the production of crude oil, condensate, or produced water. The means for determining the production rate was

also modified from a daily production rate to an average daily. This modification clarifies the intent of the requirement and addresses fluctuations in daily production while still remaining below the maximum annual production.

Section 95668(a)(2)(I) was added to clarify that gauge tanks of 100 barrels or less of total capacity are not subject to the vapor collection system requirements. Our analysis of gauge tanks shows that gauge tanks of this capacity are not used on a continuous basis, nor do they handle sufficient oil or water to approach the proposed emission standard[1]. This modification was necessary to clarify the intent of the proposed regulation.

Section 95668(a)(5)(G) was added to clarify that an owner or operator may average several flash analysis test results conducted within a single calendar year to determine the annual methane emissions. This provides a facility the ability to perform multiple tests to ensure that the system is above the emissions threshold before installing a vapor collection system. This change was necessary to allow owners or operators to perform additional flash testing and provide guidelines on how additional test results can be used to determine compliance with the standard.

Section 95668(b). Circulation Tanks for Well Stimulation Treatments

Section 95668(b)(1) was modified to clarify that the requirements apply to owners or operators that conduct well stimulation treatments, as opposed to owners or operators of circulation tanks. The section was also modified to clarify how a best practices management plan must be made available upon request by the ARB Executive Officer so that the ARB or a local air district can verify compliance with this requirement. These changes were necessary to clarify the intent of the proposed regulation.

Section 95668(b)(1)(B) was modified to change the term "reduce" to "minimize." The best management practices plan is intended to require operators to seek all possible ways to minimize venting from circulation tanks but is not intended to require emission controls. This modification is necessary to clarify the intent of the proposed regulation.

Section 95668(b)(2) was modified to clarify that the requirements apply to owners or operators that conduct well stimulation treatments, as opposed to owners or operators of circulation tanks, and was modified to clarify the requirements of the technology assessment. These changes were necessary to clarify the intent of the proposed regulation.

Section 95668(b)(2)(A) was modified to clarify that each owner or operator, either individually or as part of a group of owners and operators, must conduct a technology assessment and emissions testing resulting in testing in at least three different production fields from wells with different characteristics. This provides the minimum amount of information needed for ARB to evaluate emission control equipment. The modifications to this section also clarify the party responsible for conducting a

[1] Western States Petroleum Association. 2016. Gauge Tanks Inventory, Operations Data, and Methane Emissions

technology assessment and clarifies that owners or operators may work together to perform an assessment in at least three different production fields. These changes were necessary to clarify the intent of the proposed regulation and to provide greater clarity on how the requirements will be implemented.

Section 95668(b)(2)(B) was added to clarify that each owner or operator or group of owners or operators must notify ARB prior to conducting a technology assessment. This change was necessary to ensure that ARB and owners or operators work together while developing the assessment so that both parties can assist each other with contacting equipment manufacturers or measuring emissions and ensure that the assessment is performed as intended.

Section 95668(b)(2)(C) was modified to clarify information that is required for ARB to evaluate emission control equipment used in conjunction with circulation tanks. This includes the results of testing in at least three different production fields within California to evaluate wells with different operating characteristics of wells and facilities. A list of specific information was added to clarify the minimum requirements. These requirements are necessary to ensure that adequate information and test data are gathered for ARB to make an informed decision on the requirement to control emissions from circulation tanks by January 1, 2020.

Section 95668(b)(3) was added to specify that ARB must review the results of a technology assessment and make a determination on the requirement for the installation of vapor collection systems by no later than July 1, 2019. This modification was necessary to provide affected stakeholders with a date that they can expect to see an ARB determination on the use of vapor control equipment.

Section 95668(b)(4) was modified to specify that in the event that vapor collection systems for circulation tanks are not feasible, an owner or operator is not required to install a vapor collection system by January 1, 2020. This modification was necessary to specify an action that may result in the event that the technology assessment shows that controlling emissions from circulation tanks is not technically feasible.

Section 95668(b)(4)(A) was added to specify that in the event that ARB has not made a determination on the installation of vapor collection systems and control devices for use on circulation tanks by July 1, 2019, the owner or operator may continue to operate the tanks at less than 95% vapor collection and control efficiency until 180 days after ARB makes a late determination. This modification was necessary to specify requirements for circulation tanks in the event that the ARB makes a late determination.

Section 95668(c). Vapor Collection Systems and Vapor Control Devices

The text of this section has been relocated to section 95671. This modification was necessary to clarify that vapor collection system and control device requirements do not apply to all facilities, but only apply to facilities that must install this type of equipment to comply with the emission standards.

Section 95668(c). Reciprocating Natural Gas Compressors

Section 95668(c)(2) was modified to remove the term "powered." This modification was necessary to clarify that the regulation standards apply to rod packings or seals found on a reciprocating compressor and do not apply to the driver used to power the compressor. Reciprocating compressors may be powered using different technologies including natural gas, diesel fuel, or electricity. This change was necessary to clarify the intent of the proposed regulation.

Section 95668(c)(3) was modified to clarify that the proposed requirements apply to compressors located at onshore and offshore facilities. This modification was necessary to clarify the intent of the proposed regulation.

Section 95668(c)(3)(B)1. was added to specify that compressors that are not operational during a scheduled inspection are not required to be started solely for the purpose of testing the rod packing. This modification was necessary to prevent unintended emissions from testing. In these cases, the compressor rod packing must be tested within seven calendar days of resumed operation.

Section 95668(c)(3)(D)1. was added to provide a means for extending the repair timeframe. This section was necessary to address these special circumstances while maintaining a method for tracking compliance with the requirements.

Section 95668(c)(3)(D)1.a. was added to specify that a delay of repair that exceeds 30 calendar days must be reported to the ARB Executive Officer. This requirement is necessary so that these components can be tracked for compliance purposes.

Section 95668(c)(3)(F) was modified to include the term "scheduled." This change was necessary to clarify the intent of the proposed requirement.

Section 95668(c)(4)(A) was modified to clarify that the rod packing on a compressor located at these facilities is measured using an annual emission flow rate measurement and is not subject to quarterly Method 21 testing. This modification was necessary to prevent duplicative testing of a rod packing on compressors located at these facilities.

Section 95668(c)(4)(B)3. was added to specify that compressors that are not operational during a scheduled inspection are not required to be started solely for the purpose of testing the rod packing. This clarification was necessary to prevent unintended emissions. In these cases, the compressor rod packing must be tested within seven calendar days of resumed operation.

Section 95668(c)(4)(D)1. was added to provide a means for extending the repair timeframe. This section was necessary to address these special circumstances while maintaining a method for tracking compliance with the requirements.

Section 95668(c)(4)(D)1.a. was added to specify that a delay of repair that exceeds 30 calendar days must be reported to the ARB Executive Officer. This requirement is necessary so that these components can be tracked for compliance purposes.

Section 95668(c)(4)(F) was modified to include the term "scheduled." This change was necessary to clarify the intent of the proposed requirement.

Section 95668(d). Centrifugal Natural Gas Compressors

Section 95668(d)(1) was modified to clarify the different types of facilities that are subject to the proposed requirements for centrifugal natural gas compressors. This change was necessary to clarify the intent of the proposed regulation.

Section 95668(d)(2)(A) was modified to remove the term "powered." This modification was necessary to clarify that the regulation standards apply to wet seals or dry seals found on a centrifugal compressor and do not apply to the driver used to power the compressor. Centrifugal compressors may be powered using different technologies including natural gas, diesel fuel, or electricity. This change was necessary to clarify the intent of the proposed regulation.

Section 95668(d)(4) was modified to clarify that the compressor wet seal must be measured annually. This change was necessary to clarify the intent of the proposed regulation.

Section 95668(d)(4)(C) was added to specify that compressors that are not operational during a scheduled inspection are not required to be started solely for the purpose of testing. This clarification was necessary to prevent unintended emissions in order to perform measurements. In these cases, the compressor wet seal must be tested within seven calendar days of resumed operation.

Section 95668(d)(6)(A) was added to provide a means for extending the repair timeframe. This section was necessary to address these special circumstances while maintaining a method for tracking compliance with the requirements.

Section 95668(d)(6)(A)1. was added to specify that a delay of repair that exceeds 30 calendar days must be reported to the ARB Executive Officer. This requirement is necessary so that these components can be tracked for compliance purposes.

Section 95668(d)(7) was modified as a result of adding the delay of repair exemption in section 95668(d)(6)(A). This modification does not change the intent of the original requirement but was necessary to clarify the requirement.

Section 95668(d)(9) was modified to include the term "scheduled." This change was necessary to clarify the intent of the proposed regulation.

Section 95668(e). Natural Gas Powered Pneumatic Devices and Pumps

Section 95668(e)(2)(A) was modified to include a January 1, 2019 effective date which aligns with other standards that require the installation of new equipment. This modification was necessary to clarify the intent of the proposed requirements.

Section 95668(e)(2)(A)1. was modified to clarify that devices must be tested when they are idle and not actuating. The modification was necessary to clarify the intent of the proposed regulation by ensuring that an accurate measurement of the bleed rate is performed.

Section 95668(e)(3) was modified to add the term "natural gas powered" for clarification.

Section 95668(e)(4) was modified to add the term "natural gas powered" for clarification.

Section 95668(e)(5) was modified to add the term "continuous bleed natural gas powered pneumatic device" for clarification. This clarification is necessary to prevent the replacement of air powered pneumatic devices that do not emit natural gas emissions.

Section 95668(f). Liquids Unloading of Natural Gas Wells

Minor renumbering changes were made to this section, as well as a change to add the phrase "located in sectors" as previously described in section 95668.

Section 95668(g). Well Casing Vents

Minor renumbering changes were made to this section, as well as a change to add the phrase "located in sectors" as previously described in section 95668.

Section 95668(h). Natural Gas Underground Storage Facility Monitoring Requirements

Section 95668(h)(1) was modified to specify that leak detection protocols approved by the Department of Conservation shall remain in effect until an ARB monitoring plan is approved and all monitoring equipment is operational. This clarification is needed to ensure that there is no period of time in which facility is not covered by a monitoring plan used for the early detection of natural gas leaks or a well blowout.

Section 95668(h)(2) was modified to specify that equipment specifications and procedures are required for each of the monitoring plan requirements specified in section 95668(i)(5). This modification is necessary to ensure that adequate information is provided for ARB to evaluate a monitoring plan.

Section 95668(h)(3) replaces original section 95668(i)(2) and specifies a date for when ARB must approve or disapprove (in full or in part) a monitoring plan for each storage facility. The originally proposed March 1, 2018 date was changed to July 1, 2018. This

modification is necessary to ensure that ARB has adequate information to evaluate the plan and provide detailed feedback to owners or operators.

Section 95668(h)(4) was modified to provide 180 days from the date of ARB approval to implement a monitoring plan and begin monitoring at a facility. This modification is necessary to provide an owner or operator with sufficient time to purchase, install, and test equipment after the ARB fully approves a monitoring plan as specified in section 95668(h)(5).

Section 95668(h)(5) was added to specify equipment specifications and procedures for equipment that is specified under the revised monitoring plan. The revised monitoring plan is a result of Senate Bill 887[2], which requires facilities to implement a leak prevention and response program that addresses the full range of natural gas leaks possible at a facility along with specific response plans that provide for immediate control of leaks. The monitoring plan contains three primary elements including ambient methane monitoring, leak detection monitoring, and optical gas imaging of a well blowout. This modification is necessary to ensure that the full range of leaks are monitored as required under Senate Bill 887 while implementing the use of the best available instrument technologies and procedures.

Section 95668(h)(5)(A) was modified to specify that upwind and downwind monitoring sensors are required at sufficient locations at a facility to measure methane emissions in the atmosphere. This modification is necessary to ensure that adequate monitoring sensors are installed at a facility in order to comply with the intent of the proposed regulation to monitor the facility for the early detection of leaks or a well blowout.

Section 95668(h)(5)(A)1. was added to specify the revised ambient air monitoring requirements. These changes specify how upwind and downwind sensors are required at each facility. This modification is necessary to provide for sufficient sensors to emissions of methane that may flow into a facility from surrounding sources and aid the owner or operator in quickly determining the source of a leak.

Section 95668(h)(5)(A)1.a. was added to provide minimum instrument specifications of the upwind and downwind sensors. This specification is necessary ensure that accurate measurements and test data are gathered.

Section 95668(h)(5)(A)1.b. was added to provide the minimum calibration frequency of the upwind and downwind instruments. This requirement is necessary to ensure that the instruments perform measurements and gather data as intended.

Section 95668(h)(5)(A)2. was added to specify that sensors used to measure meteorological conditions are required as part of a continuous monitoring system. This requirement is necessary to determine the meteorological conditions at a facility, including wind speed and direction, in order to adequately develop an emissions baseline and determine the source of emissions under potential alarm conditions.

[2] Pavley, Statutes of 2016, codified in part as section 42710 of the Health and Safety Code

Section 95668(h)(5)(A)3. was added to specify the storage capacity of a data acquisition system and the types of reports that are required. This section is necessary to ensure that the monitoring system is capable of generating reports that allow the owner or operator and the ARB to adequately evaluate data gathered by the system.

Section 95668(h)(5)(A)4. was added to specify that the monitoring system must have an integrated alarm system that notifies the facility owner or operator if a measurement exceeds the emissions baseline. This requirement is necessary to notify the owner or operator that a leak has been detected so that the facility can immediately investigate the incident and notify ARB and other agencies in the case of an emergency.

Section 95668(h)(5)(A)5. was added to specify that all data must be made available upon request by ARB and submitted to ARB annually. These requirements are necessary for ARB or local air district inspectors to verify that the system is operational during routine inspections, as well as provide data that ARB can make available to the public on an ARB maintained public web site.

Section 95668(h)(5)(A)6. was added to specify an implementation date of January 1, 2020 for when a facility must establish a methane baseline using at least 12 months of continuous monitoring data. This requirement is necessary to specify the duration for which baseline conditions are gathered and a date for when a system must be fully operational. The 12 month monitoring period was chosen because ambient levels of methane can change during different seasons. This provides for sufficient time to perform measurements during spring, summer, fall, and winter conditions.

Section 95668(h)(5)(A)7. was added to specify that the alarm system must be programmed to trigger an alarm if the downwind sensor detects methane at a concentration that is greater than or equal to four times the baseline conditions. This requirement is necessary to specify the alarm system parameters. The alarm specification factor of four (4) times the upwind measurement was determined using measurement data gathered from Aliso Canyon[3].

Section 95668(h)(5)(A)8. was added to specify that a facility owner or operator must notify the designated agencies that an alarm has been triggered. This requirement is necessary to ensure that the appropriate authorities are notified promptly in order to perform an investigation of the incident.

Section 95668(h)(5)(A)9. was added to specify that the baseline monitoring conditions may be re-evaluated every 12 months. This allows the facility to make changes to the baseline and the alarm trigger once each calendar year. This requirement is necessary in case there are changes in local ambient conditions, including new emission sources in the area around the facility.

Section 95668(h)(5)(B) was modified to clarify that different types of leak screening methods that can be used at injection/withdrawal wellhead assemblies. This

[3] Air Resources Board. 2016. SoCal Gas Aliso Data

modification is necessary to accommodate the use of different leak screening technologies.

Section 95668(h)(5)(B)1. was added to clarify that US EPA Method 21 must be used as a daily test method unless alternative leak screening instruments are approved by ARB. Due to the evolving nature of instruments, and the requirement that facilities must perform daily leak screening, we have allowed the option to use alternative instruments provided they are effective at detecting leaks at the thresholds specified in section 95669. This requirement is necessary to ensure that ARB has fully evaluated alternative instruments and approved them prior to their use at a facility.

Section 95668(h)(5)(B)2. was modified to clarify that an automated leak screening system must be used in conjunction with a monitoring system that notifies operators of a leak. This requirement is necessary to ensure that the automated system has the capability to notify the owner or operator that a leak has been detected.

Section 95668(h)(5)(B)2.a. was modified to specify conditions for when the monitoring system must trigger an alarm condition. The additional alarm conditions are intended to align with the same leak detection and repair requirements specified in section 95669(i). This modification is necessary to clarify the requirements and ensure that they are the same requirements listed in section 95669(i).

Section 95668(h)(5)(B)2.e. was modified to clarify that more frequent calibrations may be necessary if required by an instrument manufacturer. This modification is necessary because depending on the instrument chosen to conduct leak monitoring, the manufacturer may require a more frequent calibration frequency in order for the instrument to make measurements accurately.

Section 95668(h)(5)(B)3. was added to specify that all leaks identified during daily inspections or by a continuous monitoring systems must be tested within 24 hours of detection by using the Method 21 test method. This requirement is necessary to ensure that leaks are accurately quantified using a repeatable test method. The results are also used to determine compliance with the standards and repair timeframes listed in section 95669.

Section 95668(h)(5)(B)4. was added to specify that all leaks identified during daily inspections or by a continuous monitoring system must be repaired within the timeframes specified in section 95669. This requirement is necessary to reduce emissions in accordance with the intent of the proposed regulation.

Section 95668(h)(5)(B)5. was added to specify that a well blowout constitutes a violation the subarticle. This section is necessary to provide a mechanism for assessing penalties for substantial leaks that are not quantifiable using handheld instruments.

Section 95668(h)(5)(B)6. was modified to specify an alarm condition that aligns with the maximum allowable leak thresholds specified in section 95669(i) Table 4. Additional

changes were made to remove the 200-foot well monitoring radius, which was replaced with the continuous ambient air monitoring requirement specified in section 95668((i)(5)(a). These modifications are necessary to reflect modifications to the regulation which were made as a result of requirements listed in Senate Bill 887.

Section 95668(h)(5)(B)7. was added to specify that owners or operators must maintain records of leak concentration measurements and must make those records available at the request of the ARB Executive Officer. This modification is necessary to ensure that ARB can adequately monitor compliance during routine field inspections.

Section 95668(h)(5)(B)8. was added to specify that leak concentration records must be reported to ARB. This requirement is necessary so that ARB can monitor compliance and monitor the effectiveness of the leak detection and repair requirements.

Section 95668(h)(5)(C) was added to specify that Optical Gas Imaging is required to document a well blowout incident and to list each of the specific requirements. This section was added in response to monitoring requirements specified within Senate Bill 887. In the event of a well blowout, a facility owner or operator is required to obtain video footage and then make the footage publicly available. This requirement is necessary to ensure that ARB, the public, and government agencies are provided with a visual means of monitoring a blowout in order to inform people living or working in an affected community on the status of the incident, or so that the proper agencies can provide emergency services or ARB can provide additional air monitoring.

Staff also added legal citations to the authority and reference sections of the note at the end of Section 95668 to reflect that the regulation implements recent statutory direction on underground natural gas storage monitoring programs. These additional statutory citations are needed to identify additional authority for the regulation.

E. Modifications to Section 95669. Leak Detection and Repair.

Section 95669(b)(1) was modified to include the term "wells," which are considered a component, and to clarify that components subject to a local air district inspection program that is in place by January 1, 2018 are not subject to the proposed leak detection and testing requirements. The modifications are necessary to clarify the intent of the proposed regulation.

Section 95669(b)(2) was modified to clarify that the API gravity of crude oil is determined by using reports submitted to the Department of Conservation Division of Oil, Gas, and Geothermal Resources. This clarification is necessary to specify how compliance with this exemption is determined.

Section 95669(b)(6) was modified to specify that any component used to supply compressed air to instrumentation or equipment is not required to be emissions tested. This clarification is necessary to prevent the need for testing components with no ability to produce natural gas emissions.

Section 95669(b)(7) was modified to clarify that tube fittings must be measured at startup or during the first leak inspection to determine if the they are below the minimum allowable leak threshold and therefore exempt from quarterly testing requirements. This modification was made primarily to allow for measuring components at startup which reflects the intent of the proposed regulation.

Section 95669(b)(12) was added to clarify that components on wells used for steam injection or water flood injection are not required to be emissions tested. This modification is necessary to prevent the need for testing components used in conjunction with steam or water that do not have the ability to produce emissions.

Section 95669(b)(13) was added to further clarify that pneumatic devices or pumps that use compressed air or electricity to operate are not required to be emissions tested. This clarification is necessary to prevent the need for testing components with no ability to produce emissions.

Section 95669(b)(14) was added to clarify that a rod packing on a compressor subject to the requirements of section 95668(c)(4)(B) is not subject to the leak detection and repair testing because the rod packing on these units are subject to annual emission flow rate testing. This section is necessary to prevent these components from being subject to two different testing requirements and emission standards.

Section 95669(e) was modified to clarify that components which are inaccessible or unsafe to monitor are not required to be inspected daily or weekly. This modification was necessary so that owners or operators are not required to enter restricted areas on a regular basis in order to perform these inspections. These components are still subject to annual emissions testing.

Section 95669(g) was modified to remove a provision that allowed for changing the inspection frequency from quarterly to annually based on staff's recommended 15-day changes and Board member direction. This provision was removed based on information we received since the release of the 45 day package, including the US EPA's removing of a similar step down provision in its recently finalized new source performance standard rules. In addition, at our recent methane symposium, more research came to light emphasizing the random nature of super emitter leaks and that more frequent monitoring is indicated[4]. Finally, there have been other leaks at other natural gas storage facilities, not of the magnitude of the Aliso Canyon well blowout, but which further argue for more frequent inspections. These modifications are necessary to clarify the revised requirements in accordance with the 15-day changes.

Section 95669(g)(1) was modified to clarify that Optical Gas Imaging (OGI) instruments may not be used in place of US EPA Reference Method 21 during quarterly inspections,

[4] Brandt A.R., Heath G.A., Cooley D. 2016. Methane leaks from natural gas systems follow extreme distributions. Environmental Science and Technology, 50 (12512-12520)

and clarifies the training requirements for operating an OGI instrument. The modifications were necessary to clarify the requirements for using OGI instruments.

Section 95669(h)(3) was modified to include the term "scheduled." This change is necessary to clarify the intent of the proposed requirement. This section was also modified to include the term critical process unit. This modification is necessary to clarify the intent of the proposed requirement.

Section 95669(h)(4) was added to provide a means for the ARB Executive Officer to extend the repair timeframes. This section is necessary to address special circumstances while maintaining a method for tracking compliance.

Section 95669(h)(4)(A) was added to provide a means for extending the repair timeframe in the event that parts or equipment required to make repairs are on order. This modification is necessary to allow for instances where an owner or operator is not able to make repairs because parts or equipment are not available.

Section 95669(h)(4)(A)1. was added to specify that a delay of repair that exceeds 30 calendar days must be reported to the ARB Executive Officer. This requirement is necessary so that these components can be tracked for compliance purposes.

Section 95669(h)(4)(B) was added to address special conditions where a gas utility must be able to supply gas to the public or other end users, such as during periods of heavy demand. This requirement is necessary to ensure that natural gas is supplied in a safe and reliable manner. In these cases, the gas utility must be able to provide proof that the system has been classified as critical to system reliability. All repairs must be made within the specified repair timeframes after the system resumes normal operation.

Section 95669(h) Table 2 was modified to include the term "scheduled." This modification is necessary to reflect the intent of the proposed regulation. Table 2 was also modified to extend the repair timeframe of critical components from 180 days to 12 months. This modification is necessary because stakeholder comments revealed that 180 days does not provide sufficient time to schedule the shut down and make repairs of critical components and process units. Table 2 was also modified to include the phrase "whichever is sooner,' which is required to clarify the intent of the regulation and this requirement. Finally, Table 2 was also modified to include the term "critical process unit." This modification is necessary to specify that the requirement also applies to critical process units.

Section 95669(i)(4) was modified to include the term "critical process unit." This modification is necessary to clarify the intent of the proposed requirement.

Section 95669(i)(5) was added to provide a means for the ARB Executive Officer to extend the repair timeframes. This section is necessary to address special circumstances while maintaining a method for tracking compliance.

Section 95669(i)(5)(A) was added to provide a means for extending the repair timeframe in the event that parts or equipment required to make repairs are on order. This modification is necessary to provide for instances where an owner or operator is not able to make repairs because parts or equipment are not available.

Section 95669(i)(5)(A)1. was added to specify that a delay of repair that exceeds 30 calendar days must be reported to the ARB Executive Officer. This requirement is necessary so that these components can be tracked for compliance purposes.

Section 95669(i)(5)(B) was added to address special conditions where a gas utility must be able to supply gas to the public or other end users, such as during periods of heavy demand. This requirement is necessary to ensure that natural gas is supplied in a safe and reliable manner. In these cases, the gas utility must be able to provide proof that the system has been classified as critical to reliability. All repairs must be made within the specified repair timeframes after the system resumes normal operation.

Section 95669(i) Table 4 was modified to include the term "scheduled." This modification is necessary to reflect the intent of the proposed regulation. Section 95669(h) Table 2 was also modified to extend the repair timeframe of critical components from 180 days to 12 months. This modification is necessary because stakeholder comments revealed that 180 days does not provide sufficient time to schedule the shut down and make repairs of critical components and process units. Table 4 was also modified to include the phrase "whichever is sooner,' which is required to clarify the intent of the regulation and this requirement. Finally, Table 4 was also modified to include the term critical process unit. This modification is necessary to specify that the requirement also applies to critical process units.

Section 95669(m) was modified to provide additional clarity for the requirements pertaining to open-ended lines, and was expanded into two new subsections.

Section 95669(m)(1) was added to clarify that open-ended lines that are not capped or sealed must be capped or sealed within 14 calendar days.

Section 95669(m)(2) was added to clarify that lines which are already capped and sealed but found leaking must be repaired according to the leak concentration and repair timeframes specified.

Section 95669(o)(1) was modified to specify that the compliance requirements during this inspection period only apply during an ARB Executive Officer inspection. This modification is necessary to clarify the intent of the proposed regulation.

Section 95669(o)(2) was modified to specify that the compliance requirements during this inspection period only apply during an ARB Executive Officer inspection. This modification is necessary to clarify the intent of the proposed regulation.

Section 95669(o)(3) was modified to specify that the compliance requirements during this inspection period only apply during an ARB Executive Officer inspection. This modification is necessary to clarify the intent of the proposed regulation.

Section 95669(o)(4) was modified to specify that a failure to repair leaks within the timeframes specified during any inspection period shall constitute a violation of the requirements. This modification is necessary to clarify the intent of the proposed regulation.

Section 95669(o)(5) was added to specify additional compliance requirements. This modification specifies that leaks discovered by an operator during the fourth quarterly inspection conducted each calendar year are subject to the enforcement action. This modification was necessary to provide operators with the ability to find and repair leaks throughout the calendar year without a penalty which is consistent with the intent of the proposed regulation. An owner or operator is subject to enforcement action if a sufficient number of leaks or leaks above the maximum threshold are discovered during the 4th quarterly inspection conducted each calendar year. This requirement is necessary to ensure that facilities are maintained in compliance with the standards.

F. Modifications to Section 95670. Critical Components.

Section 95670(a)(1) was added to clarify that critical components that are subject to an existing local air district leak detection and repair program as of January 1, 2018 are not subject to the critical component requirements covered by the proposed regulation. This requirement is necessary to clarify that the components are not required to be subject to different leak detection and repair programs.

Section 95670(b) was modified to include the term "critical process unit." This clarification is necessary to enable an owner or operator to apply for approval of a unit (engine, boiler, compressor, etc.) without the need to list every component associate with the process unit. This modification is consistent with the intent of the proposed regulation.

Section 95670(c) was modified to include the term "critical process unit" to clarify that an owner or operator may submit records for a critical process unit or individual components. This modification is necessary to align with modifications in 95670(b) and is consistent with the intent of the proposed regulation.

Section 95670(d) was modified to clarify that an owner or operator must maintain and be able provide records of critical components or a critical process units that has been approved by the ARB Executive Officer. This modification is necessary so that inspectors can verify compliance with requirements during a routine inspection.

Section 95670(e) was modified to provide clarity on how an owner or operator can identify critical components or critical process units, and section 95670(e)(2) was added to provide the option to identify a unit that may include a number of components using a

drawing or diagram as an alternative to tagging all components individually. These modifications are necessary to specify alternative methods for identifying components while still providing a means to verify compliance with the regulation.

Section 95670(f) was modified to clarify that the ARB Executive Officer retains the right to deny a request for a critical process unit approval. This modification is necessary to provide ARB with the ability to deny a request for approval in the event that component or process is not determined to be critical or in the event that sufficient documentation is not provided.

G. Modifications to Section 95671. Vapor Collection Systems and Vapor Control Devices

The text of this section was moved from section 96668(c) to this location and all subsections have been renumbered. This modification is necessary to clarify that vapor collection system and control device requirements do not necessarily apply to all facilities, but only apply to facilities that must install this type of equipment to comply with the emission standards.

Section 95671(a) was modified to provide additional clarity on the types of equipment that are subject to the vapor collection system and control device requirements. These clarifications, along with moving the section out of section 95668, are necessary to clarify the types of equipment that are subject to the proposed regulation standards.

Section 95671(b) was modified to clarify that collected vapors may be sent to new or existing sales gas or fuel gas systems or underground injection wells. This modification is necessary to make clear that these systems may be built new as part of new oil or gas facilities.

Section 95671(e) was modified to change the effective date of the requirements from January 1, 2018 to January 1, 2019. This modification was necessary to provide time for dismantling equipment. This modification also aligns with the January 1, 2019 effective date for the installation of new systems. Also included is a clarification for the effective date for when circulation tanks must be controlled using this equipment. This modification is necessary to clarify the effective date for when circulation must be controlled with the use of a vapor collection system.

Section 95671(f) was modified to include the term "calendar year." This modification is necessary to clarify the intent of the proposed requirements. This section was also modified to create subcategories for the different requirements. This modification is necessary to provide greater clarity on the proposed requirements.

Section 95671(f)(1)(a) was modified to include the term "calendar year." This modification is necessary to clarify the intent of the proposed requirements.

G. Modifications to Section 95672. Record Keeping Requirements.

Section 95672(a) was modified to reflect changes to the numbering convention of the regulation and to provide additional clarity on why it is necessary for an owner or operator to maintain records. These modifications are necessary to reflect changes to the regulation.

Section 95672(a)(2) and (3) were added to accommodate revisions to the separator and tank system requirements. These new sections are necessary to accommodate the changes in the regulation.

Section 95672(a)(4) was added to accommodate revisions to the circulation tank requirements. This new requirement is necessary to accommodate the changes in the regulation.

Section 95672(a)(7) and (8) were added to accommodate revisions to the reciprocating compressor requirements. These new requirements are necessary to accommodate the changes in the regulation.

Section 95672(a)(10) and (11) were added to accommodate revisions to the centrifugal compressor requirements. These new requirements are necessary to accommodate the changes in the regulation.

Section 95672(a)(16) was added to specify that an owner or operator must maintain records of data gathered from a continuous air monitoring system. This requirement is necessary so that the ARB Executive Officer can verify compliance with the air monitoring provision.

Section 95672(a)(19) was added to specify that an owner or operator must maintain records that prove that parts or equipment required to make repairs are on order. This requirement is necessary so that the ARB Executive Officer can verify compliance with the delay of repair provision.

Section 95672(a)(20) was added to specify that a gas utility company must be able to provide proof that a system has been classified as critical to system reliability. This requirement is necessary so that the ARB Executive Officer can verify compliance with the delay of repair provision.

Section 95672(a)(21) was added to specify that an owner or operator must maintain records that provide proof that parts or equipment required to make repairs to a vapor collection system or control device are on order, in the event that the repair goes beyond the allowable repair time period. This requirement is necessary so that the ARB Executive Officer can verify compliance with the delay of repair provision.

H. Modifications to Section 95673. Reporting Requirements.

Section 95673(a) was modified to incorporate a date for when reporting is required in each year. This modification was necessary to provide an owner or operator with sufficient time to organize and report information from the prior calendar year.

Section 95673(a)(8) was modified to incorporate the revised reporting requirements that were added to the underground natural gas storage section. This requirement is necessary to ensure that data is reported to ARB as intended.

Section 95673(a)(9) was modified to incorporate the revised reporting requirements that were added to the underground natural gas storage section. This requirement is necessary to ensure that data is reported to ARB as intended.

Section 95673(a)(11) was added to incorporate the revised reporting requirements that were added to the underground natural gas storage section. This requirement is necessary to ensure that data is reported to ARB as intended.

I. Modifications to Section 95674. Implementation.

Section 95674(b)(2)(A) was modified to change the term "MOU" to "Memorandum of Agreement." This change has no impact on the proposed requirements but was necessary for consistency with the title of the document.

J. Modifications to Section 95675. Enforcement.

This section number was modified as a result of renumbering the preceding sections. No other changes were made to this section.

K. Modifications to Section 95676. No Preemption of More Stringent Air District or Federal Requirements.

This section number was modified as a result of renumbering the preceding sections. No other changes were made to this section.

L. Modifications to Section 95677. Severability.

This section number was modified as a result of renumbering the preceding sections. No other changes were made to this section.

M. Modifications to Appendix C. Test Procedure for Determining Annual Flash Emission Rate of Gaseous Compounds from Crude Oil, Condensate, and Produced Water.

Section 2 was modified to update referenced sampling methods and to reference a newly added bubble point measurement procedure. These modifications were necessary to reflect updates to the procedure.

Section 3.3 was added to include a new definition of "bubble point pressure." This change was necessary to accommodate a new term added to the procedure, and the bubble pressure is necessary in order to perform a flash analysis.

Section 3.9 was modified to clarify the definition of "flash or flashing." This change was necessary because the term "dissolved" was not technically accurate. An additional change was also made to clarify that flashing occurs when liquid is transferred from a pressure vessel to an atmospheric tank. This change was necessary in order to clarify different vessels and processes where flashing can occur.

Section 3.10 was modified to add the term "floating" to the title of the definition. This modification was necessary to properly identify the sample cylinder. The term "crude oil" was also added to the definition. This modification was necessary to clarify that this type of cylinder may also be used for collecting samples of crude oil.

Section 3.14 was modified to clarify how to determine operating pressure. This change was necessary to ensure that repeatable data is gathered and to provide a technician on how to determine pressure when gathering samples.

Section 3.15 was modified to clarify how to determine operating temperature. This change was necessary to ensure that repeatable data is gathered and to provide a technician on how to determine temperature when gathering samples.

Section 3.23 was added to include a new definition of "target temperature." This change was necessary because the term was not previously defined in the procedure, and the target temperature is necessary in order to perform a flash analysis.

Section 4.3 was modified to clarify that drain value must be closed when collecting a liquid sample from a pressure vessel that drains liquid. This clarification was necessary to prevent a technician from gathering samples while a vessel is drain valve is open.

Section 4.6 was modified to specify that pressure and temperature gauges used to perform liquid sampling must be calibrated at least twice per year. This change was necessary to ensure that technician use calibrated equipment to gather samples. This change is necessary to ensure that accurate and repeatable data are gathered.

Section 4.9 was added to account for the newly added bubble point measurement procedure. This change is necessary to notify a laboratory that failure to perform this procedure can bias the test results.

Section 4.10 was added to specify that failure to perform a flash analysis other than the method specified procedure may produce biased or different results. This change is necessary to notify a laboratory that failure to perform this procedure as specified can bias the test results.

Section 5.1 was modified to revise the minimum specifications required for a pressure gauge used in conjunction with sampling. These changes are necessary to ensure accurate measurements are gathered in the field so they can be verified with performing the bubble point measurement.

Section 6.4 was modified to clarify that components used to gather a sample be able to withstand the same pressure and temperature of the vessel sampled. This modification is necessary to ensure that the correct fittings and connections in conjunction with sampling.

Section 7.2 was modified to specify the data requirements that must be included on a sample cylinder identification tag at the time of sampling. The list was modified to ensure that the pressure, temperature, and downstream atmospheric separator or tank temperature are recorded. These modifications are necessary so that the laboratory can perform a flash analysis in accordance with the procedure as specified.

Section 8.1(a) was added to provide an alternate method of collecting produced water samples. The alternate method uses the sample water as a displacement and does not require a double valve cylinder to be filled with a non-reactive displacement liquid. This change is necessary to provide an alternative sampling method for produced water.

Section 8.2 was modified to clarify that samples must be taken from a pressure separator if no other vessel is available. This change is necessary to ensure that samples are gathered under pressure. A modification was also made to include the word condensate. This change is necessary to clarify that the procedure is applicable for evaluating samples of condensate.

Section 8.7(a) was added to accommodate the newly added alternative sample collection methodology that is used for collecting produced water samples. The requirements specify how a cylinder must be filled and purged using pressurized produced water from the collection vessel. This change is necessary to provide specific guidance on collecting samples using an alternative sampling method.

Section 8.9 was modified to change the sampling rate to no more 60 milliliters per minute and specify that the cylinder must not be filled to more than 70 percent of capacity. These changes are necessary to ensure that gas remains entrained in liquid when it is gathered, and to provide an added safety precaution for transporting cylinders from a job site to a laboratory.

Section 8.12 was added to specify that approximately 20% of the deionized displacement water must be drained from the cylinder in order to create a headspace in the cylinder for transport and safety reasons. This change is necessary for safety and to ensure that a pressurized sample cylinder does not pose a safety hazard.

Section 9.1 was modified to clarify that samples must be taken from a pressure separator, and if no pressure separator is available to gather a sample, a portable

pressure separator must be temporarily installed to perform the sampling. This change is necessary to ensure that samples are gathered under pressure.

Section 9.6 was modified to verify that the gas pressure in the sample cylinder is greater than the vessel to be sampled. This change is necessary so that a technician can control the flow and sampling rate of pressurized liquid.

Section 9.8 was modified to change the sampling rate to no more 60 milliliters per minute to ensure that gas remained entrained the liquid when a sample is gathered, and to change the maximum volume of sample to 80 percent in order to ensure that sufficient headspace is left in the cylinder for transport to a laboratory. These changes are necessary to ensure that is not allowed to flash while the sample is gathered.

Section 10.2(d) was modified to clarify the temperature control requirements. These changes are necessary to ensure that a laboratory properly maintains temperature of the gas to ensure that accurate measurements are taken.

Section 10.2(e) was added to specify a volume meter which is required to conduct the revised laboratory flash analysis. This change is necessary to provide guidance on the type of meter that is required to make precise laboratory measurements as intended by in proposed procedure.

Section 10.2(f) was modified to clarify the type of equipment that is required by a laboratory to perform the specified test methods. This change is necessary to ensure that laboratories use the proper types of equipment when performing measurements.

Section 10.2(g) was added to specify that a metering pump is required to perform testing. This change is necessary to provide guidance on the type of pump that is required in order to make precise laboratory measurements as intended by in proposed procedure.

Section 10.3 was added to specify requirements for a bubble point and sample integrity check. The new requirements are necessary to ensure that a sample was gathered correctly from a pressure separator, and to ensure that the cylinder did not leak during transport or shipping. This procedure is also used as a preliminary quality assurance check by the laboratory. In the event that a cylinder does not pass the bubble point criteria specified, the laboratory is not required to perform the referenced test methods but must go back to the pressure separator and gather a new sample. These requirements are necessary to ensure that all measurements are intended in proposed procedure.

Section 10.4 was modified to revise the requirements, and provide additional clarity, for performing a laboratory flash analysis test procedure. The procedure is combined with the bubble point sample integrity check and provides greater clarity for specifying how the laboratory must conduct the procedure. These revisions are necessary to provide uniformity amongst different laboratories conducting the procedure. The revisions

provide greater clarity and provide more detail on how a laboratory must perform the measurements, including clarity on how a sample is conditioned. These changes are necessary to ensure that all measurements are intended in proposed procedure.

Section 10.5(b) was modified to clarify that the test procedure is applicable for samples of condensate. This change is necessary to clarify that the procedure is applicable for evaluating samples of condensate.

Section 10.6(b) was modified to replace the ASTM D-2597 test method with equivalent test method ASTM D-7096. This change is necessary to ensure that the procedure contains current applicable references.

Section 11 was modified to clarify that this section pertains to the owner or operator of a separator and tank system. This change is necessary to clearly define the correct party responsible for performing the calculations.

Section 11.1 was modified in conjunction with changes to Form 1. These changes clarify that DOGGR certified reports and number of days per year that a system operates are data points that are the responsibility of the owner or operator to provide, and that they are not required to be reported on Form 1. These modifications are necessary so that the sampling technician and the owner or operator understand which party is responsible for providing data.

Form 1 was modified to reflect the changes made in the test procedure. This included eliminating data fields that were not necessary for a laboratory to conduct a flash analysis and revising with the required sample data. These changes are necessary to reflect updates to the procedure and to ensure that the correct data is gathered.

Environmental Analysis

These modifications do not change implementation of the regulation in any way that affects the conclusions of the environmental analysis included in the Staff Report because the proposed modifications only clarify the terms of the regulation or add new monitoring or analysis requirements that will not foreseeably alter the compliance responses described in the environmental analysis so no additional environmental analysis or recirculation of the analysis is required.

Additional Documents Added to the Record

Staff has added to the rulemaking record and invites comments on the following additional document set forth in Attachment 1 to this Notice:

- ASTM D-7096-16 *Standard Test Method for Determination of the Boiling Point Range Distribution of Gasoline by Wide Bore Capillary Gas Chromatography. 2016.*

Staff has also added to the rulemaking record and invites comments on the following additional documents set forth in Attachment 2 to this Notice:

- Summary of Cost, Emissions, and Cost per Ton using the 20 year and 100 year Global Warming Potential, respectively
- Revised Emission and Cost Estimates for the Leak Detection and Repair Provision
- Revised Cost Estimates for the Natural Gas Underground Storage Facility Monitoring Requirements Provision
- External Scientific Peer Review of the Flash Analysis Test Procedure

These documents are available for inspection by contacting Trini Balcazar, Regulations Coordinator, at (916) 445-9564.

Agency Contacts

Inquiries concerning the substance of the proposed regulation may be directed to Joe Fischer, Air Resources Engineer, Oil and Gas Section, (916) 445-0071 or Ms. Joelle Howe, Air Pollution Specialist, Oil and Gas Section, at (916) 322-6349.

Public Comments

Written comments will only be accepted on the modifications identified in this Notice or documents added to the record. Comments may be submitted by postal mail or by electronic submittal no later than 5:00 pm on the due date to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to ARB in one of the two forms described above and received by ARB by 5:00 p.m. Pacific Time, on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations or the documents added to the record shall be considered by the Executive Officer. If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alterno u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

CALIFORNIA AIR RESOURCES BOARD

Richard W. Corey
Executive Officer

Date: February 3, 2017

Attachment

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see ARB's website at www.arb.ca.gov.